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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/552,727

07/07/2006

Vesa Korhonen

034382-005

9453

21839

7590

08/03/2007

BUCHANAN, INGERSOLL & ROONEY PC

POST OFFICE BOX 1404

ALEXANDRIA, VA 22313-1404

EXAMINER

BASINGER, SHERMAN D

ART UNIT

PAPER NUMBER

3617

MAIL DATE

DELIVERY MODE

08/03/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/552,727

Applicant(s)

KORHONEN ET AL.

Examiner

Sherman D. Basinger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 October 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 10/11/05&7/7/06.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

### **DETAILED ACTION**

1. The preliminary amendment filed October 11, 2005 has been received.

#### ***Drawings***

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 32 of page 5, line 2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 24 of figure 1. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing

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date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

4. Objection is made to page 1, lines 4 and 5 and page 2, lines 21-23. Objection is made because each of these passages make reference to a particular wording of a claim and to a particular claim, both of which may change. For example, a claim 10 make not be in the application upon allowance, or claim 10 make not include what is discussed in these passages.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 6, 8-11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Krautkremer et al.

Krautkremer et al discloses for claim 1 a method for controlling a propulsion drive, which drive comprises at least one first propeller drive 10, 25a, 8 and 6, which rotates a first propeller 4, and by which the propulsion power and/or rotating speed of the first propeller is adjusted, and at least one second propeller drive 11, 25b, 7 and 9, by which a second propeller 5 is rotated and adjusted, whereby the first and the second propeller drive are essentially separated from each other,

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wherein the method the propulsion drive is controlled by a single control command 18, whereby a first control signal 19, 22 and 24 for controlling the first propeller drive, and a second control signal 20, 21 and 23 for controlling the second propeller drive, are generated from the control command.

For claim 2, it is inherent that the first and the second control signals are generated to result an optimal combined propulsion and/or steering power.

For claim 3, see figure 8a where the propellers driven by the first and the second propeller drives are arranged on the essentially same horizontal level, and that the propellers are rotated in the opposite directions.

For claims 6 and 8-10 see column 4, lines 8-13.

For claim 11, see column 4, lines 8-13, column 6, lines 29-54 and column 6, lines 60-65.

Krautkremer et al discloses for claim 12 an apparatus for controlling a propulsion drive, which comprises at least one first propeller drive 10, 25a, 6 and 8 which rotates a first propeller 4, and by which the propulsion power and/or the rotating speed is controllable (see column 4, lines 8-13), and at least one second propeller drive 11, 25b, 7 and 9 which a second propeller 5 is rotatable and controllable, whereby the first and the second propeller drive are essentially separated from each other, that wherein the apparatus comprises a control device 18 to control the propulsion drive by a single control command 50, whereby based on the control command 50 the control device generates a first control signal 19, 22, 24, by which the first propeller drive is controllable, and a second control signal 20, 21 and 23, by which the second propulsion drive is controllable.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 4, 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langenberg et al in view of Krautkremer et al.

Langenberg et al discloses for claim 1, a method for controlling a propulsion drive, which drive comprises at least one first propeller drive 201, 203, 204, which rotates a first propeller 5, and by which the propulsion power and/or rotating speed of the first propeller is adjusted, and at least one second propeller drive 103, 101 and 102 by which a second propeller 1 is rotated and adjusted, whereby the first and the second propeller drive are essentially separated from each other.

Langenberg et al does not disclose that the propulsion drives are controlled by a single control command, whereby a first control signal for controlling the first propeller drive, and a second control signal for controlling the second propeller drive, are generated from the control command.

Krautkremer et al discloses his propulsion drive is controlled by a single control command 50, 18, whereby a first control signal 19, 22 and 24 for controlling a first propeller drive 6, 8, 10 and 25a, and a second control signal 20, 21 and 23 for controlling a second propeller drive 7, 9, 11 and 25b, are generated from the control command.

In view of 50 and 18 of Krautkremer et al it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide to Langenberg et al a single control command similar to 50 of Krautkremer et al whereby a first control signal for controlling the first propeller drive 101, and a second control signal for controlling the second propeller drive 201 are generated from the control command.

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Motivation to do so is to combine control of the propeller drives from one input device through a microprocessor.

For claim 4, 201 is clearly an electrical motor that has been arranged into an azimuth pod.

For claim 5, the second propeller drive is a power engine 101 that has been arranged on a fixed shaft.

In Langenberg et al both propellers 1 and 5 clearly have fixed blades.

### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherman D. Basinger whose telephone number is 571-272-6679. The examiner can normally be reached on Monday through Friday, 5:30 a.m. to 2:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel J. Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sherman Basinger/  
Sherman Basinger, PE  
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Thursday, August 02, 2007